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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|----------------|----------------------|---------------------|-----------------|
| 09/519,221 | 03/06/2000 | Chaitanya Kanojia | 2657.2001005 | 7967 |
| 21005 | 7590 05/06/ | 005 | EXAMINER | |
| HAMILTO 530 VIRGIN | N, BROOK, SMIT | NEURAUTER | NEURAUTER, GEORGE C | |
| P.O. BOX 9133 CONCORD, MA 01742-9133 | | | ART UNIT | PAPER NUMBER |
| | | | 2143 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| · · · · · · · · · · · · · · · · · · · | Application No. | Applicant(s) | | | |
|---|--|--|--|--|--|
| | 09/519,221 KANOJIA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | George C. Neurauter, Jr. | 2143 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was really received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on 16 December 2004. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 2-7 and 9-16 is/are pending in the approach 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 2-7 and 9-16 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)). | on No In this National Stage | | | |
| Attachment(s) | | | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 12232004.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

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DETAILED ACTION

Claims 2-7 and 9-16 are pending and have been examined.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 December 2004 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 2-7 and 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 2-6, 9-13, and 15-16 are rejected under 35
U.S.C. 102(b) as being anticipated by "NewNet SMserver: Wireless
Short Message Service Tutorial". ("NewNet")

Regarding claim 2, NewNet discloses a message router system as recited in Claim 3, further comprising a system manager that tracks activity states of embedded devices on the data network and to determine whether the embedded devices are able to receive messages.

Regarding claim 3, NewNet discloses a message router system for a server system that communicates with embedded devices over a data network, the router system comprising:

a router (referred to within the reference as "Short Message Service Center" or "SMSC") coupled to a message store ("Home Location Register" or "HLR"); (page 3, Figure 1)

a queue manager queuing messages from one or more server processes that are destined for plural embedded devices (page 3, section 3.2 "Short Message Service Center", specifically "...capable of receiving a short message from the mobile network and submitting it to the appropriate SMSC"), each of the messages being addressed to one of the plural embedded devices with a unique identifier, the unique identifier being independent of any communication protocol; (page 1,

"Introduction", specifically "The point-to-point SMS provides a mechanism for transmitting "short" messages to and from wireless handsets... The service makes use of a short message service center (SMSC) which acts as a store and forward system for short messages..."; page 5, section 5 "Signaling Elements", specifically "The mechanism provides a means for the SMSC to transfer a short message to the MSC which is serving the addressed mobile station..."; page 6, section 4.2 "Subscriber Services", specifically "Mobile-oriented short messages are transported from the handset to the SMSC and can be destined to other mobile subscribers or for subscribers on fixed networks such as paging networks or electronic mail networks. Mobileterminated short messages are transported from the SMSC to the handset and can be submitted to the SMSC by other mobile subscribers...or by other sources such as voice mail systems, paging networks, or operators.")

the queue manager establishing a connection with the router and transferring the queued messages to the router; for each message, the router determining a destination address according to a communication protocol that corresponds to the unique identifier of the embedded device; (column 5, section 4 "Signaling Elements", specifically "Before attempting short message delivery, the SMSC needs to retrieve routing information

in order to determine the serving MSC for the mobile station at the time of the delivery attempt.")

for each message, the router transmitting the message directly to the destination address of the embedded device over the data network regardless of whether the embedded device is active on the data network; the router waiting for acknowledgements of the messages from the embedded devices; and the router storing unacknowledged messages in the message store corresponding ones of the plural embedded devices can accept the unacknowledged messages. (page 1, "Introduction", specifically "The service makes use of a short message service center (SMSC) which acts as a store and forward system for short messages... the service elements are designed to provide guaranteed delivery of text messages to the destination"; page 5, section 4 "Signaling Elements", specifically "The mechanism provides a means for the SMSC to transfer a short message to the MSC which is serving the addressed mobile station and attempts to deliver a message to an MS whenever the MS is registered... The operation works in tandem with the base station subsystem while the message is being forwarded... Therefore, the outcome of the [delivery] comprises either success...or failure..."; page 6, section 4.2 "Subscriber Services", specifically "For messages

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not requiring immediate delivery, one or more delivery attempts are made until an acknowledgement is received")

Regarding claim 4, NewNet discloses a message router system as recited in Claim 3, wherein the router retrieves one or more of the unacknowledged messages from the message store when the system manager indicates that an embedded device to which the one or more unacknowledged messages are addressed is able to accept the one or more unacknowledged messages. (page 4, section 3.3 "Home Location register", specifically "The HLR also informs the SMSC, which has previously initiated unsuccessful short message delivery attempts to a specific mobile station, that the mobile station is now recognized by the mobile network to be accessible")

Regarding claim 5, NewNet discloses a message router system as recited in Claim 3, further comprising a bulk data transfer manager for transferring bulk data between the server system and the embedded devices (page 8, section 4.4 "Customer Care and Management", specifically "The SMSC can also be used to transfer binary data...")

Regarding claim 6, NewNet discloses a message router system as recited in Claim 5, wherein the bulk data are transferred to the embedded devices by the router sending the embedded devices a message to download a file and a location of the file, the

embedded devices contacting the bulk data transfer manager to obtain the file. (page 8, section 4.4 "Customer Care and Management", specifically "The SMSC can also be used to transfer binary data... Examples of such services include mobile station programming, which allows customer profiles and subscription characteristics to be downloaded to the mobile station...")

Regarding claim 9, NewNet discloses a method as recited in Claim 10, further comprising tracking activity states of embedded devices on the data network and to determine whether the embedded devices are able to receive messages. (page 4, section 3.3 "Home Location register", specifically "The HLR also informs the SMSC, which has previously initiated unsuccessful short message delivery attempts to a specific mobile station, that the mobile station is now recognized by the mobile network to be accessible")

Regarding claim 15, NewNet discloses the message router system as recited in Claim 3, wherein the messages are control messages directing the embedded devices to download, install, or activate content. (page 8, section 4.4 "Customer Care and Management", specifically "The SMSC can also be used to transfer binary data... Examples of such services include mobile station programming, which allows customer profiles and subscription characteristics to be downloaded to the mobile station...")

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Claims 10-13 and 16 are also rejected since claims 10-14 recite a method that contains substantially the same limitations as recited in claims 3, 2, 4-6, and 15 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere*Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

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therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over NewNet.

Regarding claim 7, NewNet discloses a message router system as recited in Claim 6.

NewNet does not expressly disclose wherein the embedded devices directly contact the bulk data transfer manager to obtain the file without sending a message via the router, however, NewNet does disclose wherein the embedded devices directly contact the bulk data transfer manager to obtain the file (page 8, section 4.4 "Customer Care and Management", specifically "The SMSC can also be used to transfer binary data... Examples of such services include mobile station programming, which allows customer profiles and subscription characteristics to be downloaded to the mobile station...")

It would have been obvious to one skilled in the art at the time the invention was made to use a message router system that

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transfers bulk data without involving the use of the router because the Applicant has not disclosed that using the limitation undisclosed in NewNet provides any sort of an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the system described in NewNet as recited in the claim because the bulk data would be transferred in the same way since the bulk data would be transferred the same regardless of the involvement of the router. See MPEP 2183.

Claim 14 is also rejected since claim 14 recites a method that contains substantially the same limitations as recited in claim 7.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

European Telecommunications Standards Institute (ETSI).

"Digital cellular telecommunications system (Phase 2+):

Technical realization of the Short Message Service (SMS)

Point-to-Point (PP) (GSM 03.40)", version 5.3.0, July 1996, 109

pages;

US Patent 5 916 307 to Piskel et al;

US Patent 5 983 353 to McHann;

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US Patent 6 067 529 to Ray et al;

US Patent 6 166 730 to Goode et al;

US Patent 6 208 870 to Lorello et al;

US Patent 6 629 145 to Pham et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcn

DAVID WILEY SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100